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**UTILITY
PATENT APPLICATION
TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No. UMY-038

First Inventor Zuoshang Xu

Title ALLELE-SPECIFIC RNA INTERFERENCE

Express Mail Label No. EV 354228806 US

00717 U.S. PTO
107700816**APPLICATION ELEMENTS**

See MPEP chapter 600 concerning utility patent application contents.

- Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original, and a duplicate for fee processing)
- Applicant claims small entity status.
See 37 CFR 1.27.
- Specification [Total Pages 44]
(preferred arrangement set forth below)
 - Descriptive title of the invention
 - Cross Reference to Related Applications
 - Statement Regarding Fed Sponsored R & D
 - Reference to sequence listing, a table, or a computer program listing appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
- Drawing(s) (35 U.S.C. 113) [Total Sheets 9]
- Oath or Declaration [Total Sheets]
- Newly executed (original or copy)
- Copy from a prior application (37 CFR 1.63(d))
(for continuation/divisional with Box 18 completed)
- DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
- Application Data Sheet. See 37 CFR 1.76

ADDRESS TO: MS Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

7. CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission
(if applicable, all necessary)
 - a. Computer Readable Form (CRF)
 - b. Specification Sequence Listing on:
 - i. CD-ROM or CD-R (2 copies); or Paper
 - ii. Paper
 - c. Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

9. Assignment Papers (cover sheet & document(s))
10. 37 CFR 3.73(b) Statement Power of Attorney
(when there is an assignee)
11. English Translation Document (if applicable)
12. Information Disclosure Statement (IDS)/PTO-1449 Copies of IDS Citations
13. Preliminary Amendment
14. Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)
15. Certified Copy of Priority Document(s)
(if foreign priority is claimed)
16. Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i).
Applicant must attach form PTO/SB/35 or its equivalent.
17. Other: Certificate of Express Mailing (1 page)

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:

 Continuation Divisional Continuation-in-part (CIP) of prior application No.: _____

Prior application information: Examiner _____ Art Unit: _____

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS Customer Number: 00959 OR Correspondence address below

| | | | | | |
|---------|-------------------------|-----------|----------------|----------|--------------------|
| Name | LAHIVE & COCKFIELD, LLP | | | | |
| Address | 28 State Street | | | | |
| City | Boston | State | MA | Zip Code | 02109 |
| Country | US | Telephone | (617) 227-7400 | | Fax (617) 742-4214 |

| | | | |
|-------------------|---------------------|-----------------------------------|-----------------------|
| Name (Print/Type) | Debra J. Milasincic | Registration No. (Attorney/Agent) | 46,931 |
| Signature | | | Date November 4, 2003 |

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV 354228806 US, in an envelope addressed to: MS Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: November 4, 2003

Signature: _____

(Debra J. Milasincic)

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FEE TRANSMITTAL for FY 2004

Effective 10/01/2003, Patent fees are subject to annual revision.

 Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 677.00)

Complete if Known

| | |
|----------------------|-----------------------|
| Application Number | Not Yet Assigned |
| Filing Date | Concurrently Herewith |
| First Named Inventor | Zuoshang Xu |
| Examiner Name | Not Yet Assigned |
| Art Unit | N/A |
| Attorney Docket No. | UMY-038 |

METHOD OF PAYMENT (check all that apply)

 Check Credit Card Money Order Other None
 Deposit Account:

Deposit Account Number **12-0080**
 Deposit Account Name **Lahive & Cockfield, LLP**

The Director is authorized to: (check all that apply)

Charge fee(s) indicated below Credit any overpayments
 Charge any additional fee(s) or any underpayment of fee(s)
 Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION (continued)

FEE CALCULATION

1. BASIC FILING FEE

| Large Entity | Small Entity | Fee Description | Fee Paid |
|--------------------------|---------------|------------------------|---------------|
| Fee Code (\$) | Fee Code (\$) | Fee Description | Fee Paid |
| 1001 770 | 2001 385 | Utility filing fee | 385.00 |
| 1002 340 | 2002 170 | Design filing fee | |
| 1003 530 | 2003 265 | Plant filing fee | |
| 1004 770 | 2004 385 | Reissue filing fee | |
| 1005 160 | 2005 80 | Provisional filing fee | |
| SUBTOTAL (1) (\$) | | | 385.00 |

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

| | | Extra Claims | Fee from below | Fee Paid |
|--------------------|----|--------------|----------------|----------|
| Total Claims | 22 | -20** = | 3 x 9.00 = | 18.00 |
| Independent Claims | 6 | -3** = | 3 x 43.00 = | 129.00 |
| Multiple Dependent | | | 145.00 = | 145.00 |

| Large Entity | Small Entity | Fee Description |
|--------------------------|---------------|--|
| Fee Code (\$) | Fee Code (\$) | Fee Description |
| 1202 18 | 2202 9 | Claims in excess of 20 |
| 1201 86 | 2201 43 | Independent claims in excess of 3 |
| 1203 290 | 2203 145 | Multiple dependent claim, if not paid |
| 1204 86 | 2204 43 | ** Reissue independent claims over original patent |
| 1205 18 | 2205 9 | ** Reissue claims in excess of 20 and over original patent |
| SUBTOTAL (2) (\$) | | 292.00 |

** or number previously paid, if greater; for Reissues, see above

3. ADDITIONAL FEES

| Large Entity | Small Entity | Fee Description | Fee Paid |
|---------------------|---------------|--|----------|
| Fee Code (\$) | Fee Code (\$) | Fee Description | Fee Paid |
| 1051 130 | 2051 65 | Surcharge - late filing fee or oath | |
| 1052 50 | 2052 25 | Surcharge - late provisional filing fee or cover sheet | |
| 1053 130 | 1053 130 | Non-English specification | |
| 1812 2,520 | 1812 2,520 | For filing a request for ex parte reexamination | |
| 1804 920* | 1804 920* | Requesting publication of SIR prior to Examiner action | |
| 1805 1,840* | 1805 1,840* | Requesting publication of SIR after Examiner action | |
| 1251 110 | 2251 55 | Extension for reply within first month | |
| 1252 420 | 2252 210 | Extension for reply within second month | |
| 1253 950 | 2253 475 | Extension for reply within third month | |
| 1254 1,480 | 2254 740 | Extension for reply within fourth month | |
| 1255 2,010 | 2255 1,005 | Extension for reply within fifth month | |
| 1401 330 | 2401 165 | Notice of Appeal | |
| 1402 330 | 2402 165 | Filing a brief in support of an appeal | |
| 1403 290 | 2403 145 | Request for oral hearing | |
| 1451 1,510 | 1451 1,510 | Petition to institute a public use proceeding | |
| 1452 110 | 2452 55 | Petition to revive - unavoidable | |
| 1453 1,330 | 2453 665 | Petition to revive - unintentional | |
| 1501 1,330 | 2501 665 | Utility issue fee (or reissue) | |
| 1502 480 | 2502 240 | Design issue fee | |
| 1503 640 | 2503 320 | Plant issue fee | |
| 1460 130 | 1460 130 | Petitions to the Commissioner | |
| 1807 50 | 1807 50 | Processing fee under 37 CFR 1.17(q) | |
| 1806 180 | 1806 180 | Submission of Information Disclosure Stmt | |
| 8021 40 | 8021 40 | Recording each patent assignment per property (times number of properties) | |
| 1809 770 | 2809 385 | Filing a submission after final rejection (37 CFR 1.129(a)) | |
| 1810 770 | 2810 385 | For each additional invention to be examined (37 CFR 1.129(b)) | |
| 1801 770 | 2801 385 | Request for Continued Examination (RCE) | |
| 1802 900 | 1802 900 | Request for expedited examination of a design application | |
| Other fee (specify) | | | |

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 0.00)

| | | | |
|-------------------|---------------------|-----------------------------------|------------------|
| SUBMITTED BY | | (Complete if applicable) | |
| Name (Print/Type) | Debra J. Milasincic | Registration No. (Attorney/Agent) | 46,931 |
| Signature | | Telephone | (617) 227-7400 |
| | | Date | November 4, 2003 |

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Dated: November 4, 2003

Signature: _____

(Debra J. Milasincic)

Application No. (if known):

Attorney Docket No.: UMY-038

Certificate of Express Mailing Under 37 CFR 1.10

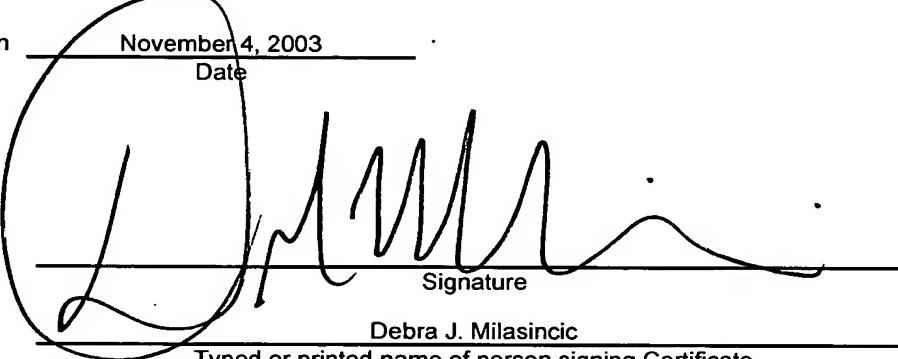
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Commissioner for Patents
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Alexandria, VA 22313-1450

on

November 4, 2003

Date



Signature

Debra J. Milasincic
Typed or printed name of person signing Certificate

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

Specification (44 pages)
12 Drawings (9 sheets)
Nucleotide and/or Amino Acid Sequence Disk
Specification Sequence Listing on paper (4 pages)
Utility Patent Application Transmittal (1 page)
Application Data Sheet (3 pages)
Statement Pursuant to 37 CFR 1.821(b) (2 pages)
Fee Transmittal (1 page)